

L 09008-67

ACC NR: AP6027785

microscope reveal thin lamellae of the γ -phase and spherical zones. The lamellae of the γ -phase, which have a hexagonal structure, produce on the photographs a contrast similar to packing defects in face-centered crystals. The quenched ternary alloy Al-Cu-Ag is characterized by pile-ups of defects, which show up as black dots on the photographs (Fig. 1, a).

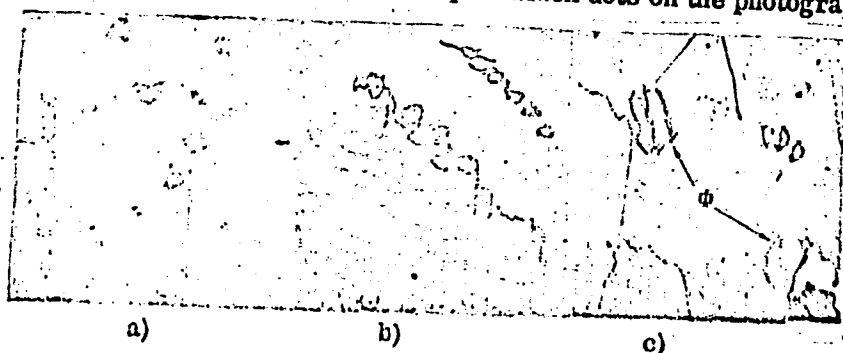


Fig. 1. Electron microphotographs of the ternary alloy
($\times 48,000$):
a - after quenching; b, c - after aging at 218°C for 30 min

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0

It is probable that these black points represent, as in Au, pile-ups of interstitial atoms and vacancies. During aging at 218°C the vacancies acquire mobility which leads to, on the one hand, the segregation of Θ' - and γ' -crystals and, on the other, the interaction between vacancies and dislocations. After aging at 218°C for 30 min the number of the pile-ups of interstitial atoms and vacancies in the form of black dots greatly decreases and there appear helicoids, dislocation loops (Fig. 1, b) and also Frank dislocations (Fig. 1, c). By contrast after quenching and aging at 130°C the Al-Cu-Ag alloy lacks dislocation loops and helicoids. This indicates that the mobility of vacancies at room temperature and at 130°C in this alloy is much lower than in the binary alloys Al-Cu and Al-Ag. Therefore, the processes of the diffusion of dissolved atoms in the ternary alloy are retarded, and it is this that leads to the expansion of the temperature range of existence of lamellar G.P. zones. Orig. art. has: 6 figures, 1 table.

SUB CODE: 11,20/ SUBM DATE: 30Jul65/ ORIG REF: 003/ OTH REF: 003

Card 3/3 nst

ZAKHAROVA, M.I.; KUZNETSOV, G.F.

Investigating the polygonization of aluminum. Fiz. met. i metalloved.
18 no.2:277-282 Ag '64. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

ZAKHAROVA, M.I.; TUMAN'YAN, Yu.A.

Calculating two-dimensional plate-type formations in the
crystalline structure. Kristallografiia 10 no.2:181-186
Mr-Apr '65.

(MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

L 65204-65 EWA(k)/EWT(1)/EWT(m)/T/EMP(t)/EMP(b)/EWA(c) IJP(c) JD/
LHB/GQ

ACCESSION NR: AP5020239

UR/0188/65/000/004/0050/0055
548.0 : 669.783

44.55
AUTHOR: Zakharova, M. I.; Tuman'yan, Yu. A.

TITLE: Determining the relative orientation between crystals of a solid solution of Ge in Al and precipitated crystals of germanium

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1965, 50-55

21, 44.55 21
TOPIC TAGS: x ray crystallography, germanium, aluminum alloy, solid solution, crystal orientation

ABSTRACT: The solubility of germanium decreases with a reduction in temperature from 5.1 wt % at 424°C to 0.30 wt % at 20°C. Therefore, germanium crystals are precipitated from the supersaturated α -solid solution during tempering of a hardened aluminum alloy with 4 wt % Ge. The authors study the mutual orientation of crystals in the face-centered cubic lattice with the diamond type lattice which is found in the Al-Ge system. The orientation of the germanium crystals was determined after tempering for 6 hours at 310°C and 20 hours at 218°C from rotating-crystal x-ray photographs and laue diffraction patterns of supersaturated single
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ACCESSION NR: AP5020239

crystals of an α -solid solution of Ge (4 wt %) in Al. The single crystals were prepared by slow crystallization from the melt and were homogenized at 425°C for two days. Cu-radiation was used for taking the rotating-crystal x-ray photographs, the single crystals of the α -solid solution being oriented with their [100] and [011] axes parallel to the axis of rotation. It was found that most of the precipitated germanium is oriented with respect to the matrix, although some of the precipitated germanium is not oriented. The maxima of the oriented precipitation do not disrupt the symmetry of the matrix, i. e. precipitation of the second phase takes place on crystallographically identical planes. Two orientations of germanium were observed:

$$\begin{aligned} (100)_\alpha \parallel (112)_{\text{Ge}}; \quad [011]_\alpha \parallel [4\bar{1}]_{\text{Ge}} \\ (100)_\alpha \parallel (110)_{\text{Ge}} \quad [001]_\alpha \parallel [001]_{\text{Ge}} \end{aligned}$$

A small increase in the microhardness of the alloy during tempering at 218°C confirms the x-ray data on precipitation of an equilibrium form of germanium at this temperature, since precipitation of a non-equilibrium phase ordinarily increases the hardness much more. The precipitation of a stable modification of germanium does not conform to the principle of structural and dimensional correspondence.

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ACCESSION NR: AP5020239

which is apparently due to the unoriented precipitation with two types of oriented precipitation. Orig. art. has: 1 figure, 3 tables.

ASSOCIATION: Kafedra fiziki kristallov Moskovskogo gosudarstvennogo universiteta
(Department of Physics of Crystals, Moscow State University) 44.55

SUBMITTED: 26Apr64

ENCL: 00

SUB CODE: SS

NO REF SOV: 003

OTHER: 002

Card 3/3

ZAKHAROVA, M.I.; KUZNETSOV, G.F.

Recrystallization and polygonization of aluminum. Dokl.
AN SSSR 159 no.1:63-65 N '64. (MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
Predstavleno akademikom A.A. Bochvarom.

ЛИВНАРОВА, М. Л.; МАЛАНЧЕНКО, Л. Д.

"Investigation of eutectoid transformation in the Cu-Sn and Cu-Be alloys."

report submitted for 6th Gen Assembly, Intl Union of Crystallography, Rome,
9 Sep 63.

Physics Dept, Moscow State Univ, Leninskiye Gory, Moscow.

ZAKHAROVA, M.I.; KHATANOVA, N.A.

Changes in the substructure of the matrix during the decomposition
process of supersaturated solid solutions in aluminum alloys. Issl.
po zharoproch. splav. 10:64-67 '63. (MIRA 17:2)

ZAKHAROVA, M.I.; MOGARYCHEVA, I.B.

Eutectoid transformation in copper - lead and copper - beryllium alloys. Kristallografiia 8 no.4:604-609 J1-Ag '63.(MIRA 16:9)

1. Meskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Copper-lead-beryllium alloys)
(X-ray diffraction examination)

L 18364-65 EWT(m)/EWA(d)/EPR/T/ENP(t)/ENP(k)/ENP(b) Pf-4/Ps-4 IJP(c)/
 ASD(f)-2/SSD(c)/ASD(a)-5/ASD(m)-3 JD/HW S/0126/64/018/002/0277/0282
 ACCESSION NR: AP4044156

AUTHOR: Zakharova, M. I.; Kuznetsov, G. F.

TITLE: Investigation of the polygonization of aluminum

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 2, 1964, 277-282

TOPIC TAGS: aluminum single crystal, polygonization, diffraction pattern,
 annealing, deformation ✓

ABSTRACT: A focusing method was applied in the investigation of the effect of deformation on polygonization in 99.99% pure Al single crystals with a different orientation in regard to the axis of elongation. After annealing for one hour at 550C, specimens were deformed by 2% and subsequently by 10% and held for 640C for 2 to 4 hours. Annealing for 8 to 170 hrs. at 450C produced no recrystallization. Despite renewed annealing at 600C for 165 hrs. recrystallization was not observed but polygonization had occurred. Specimens deformed by 10%, annealed for 30 min. at 450 C and reannealed at the same temperature for 17 hrs. pro-

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L-18364-65

ACCESSION NR: AP4044156

duced a diffraction pattern with individual point peaks caused by the polygoniza-
tion of the material. The particles are disoriented from each other by several minutes. All speci-
men is contained within a highly stable metal-
stable structure. Orig. art. has 4 figures

ASSOCIATION: Moskovskiy gosuniversitet imeni M. V. Lomonosova (Moscow
State University)

SUBMITTED: 12Aug53

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 001

Card 2/2

ZAKHAROVA, M.

9

investigation of copper-beryllium-silicon alloys. M. Zakharova and A. Churmanova. *J. Tech. Phys.* (U. S. S.-R.) 8, 2185-92 (1938).—The simultaneous soly. of Be and Si in Cu at 350° and 400° is approx. detd. by using micro-section and hardness methods. The rate of decompn. of solid solns. contg. Be 0.5 and Si 4 and Be 1 and Si 2.75%, resp., is detd. by the hardness method; it increases with the temp. of annealing and with deformation. The decompn. of these solns. give rise to the compd. Cu₂Si contg. some dissolved Be. J. J. Bikerman

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1ST AND 2ND CROSS										3RD AND 4TH CROSS									
ZAKHAROVA, M.																			
FREQUENCIES AND PROPERTIES INDEX																			
2																			
<p>Investigation of the pseudobinary section of Cu₂Si-Cu₃Si. Zakharenko and A. Shternfeld. <i>J. Tech. Phys.</i> (U. S. S. R.) 12, 2028-9 (1933).--The mutual soly. of Cu₂Si and Cu₃Si is interesting, as in both these compds. the ratio of the valency electrons to the no. of atoms is 8:2. This ratio is similar at 800° Cu₂Si dissolves 1% of Si and Cu₃Si dissolves less than 0.5% of Si. Calcul. of the soly. patterns shows that atoms in the mixts. of Cu₂Si and Cu₃Si are distributed statistically. J. I. B.</p>																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION										X-ESTIMATE INDEX									
FROM SYMBOLIC										FROM SYMBOL									
GROUP NO.										GROUP NO.									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20									

Zakharova, M.

*The Transition Structures in Copper-Nickel-Iron Alloys. D. Balli and M. Zakharova (Doklady Akad. Nauk S.S.R., 1954, 88, (3), 452-453; Russian). The theoretical derivation of a more exact model of the initial stage of decomposition of solid soln. in Cu-Fe-Ni alloys below 600° C. is presented. The considerations take into account the amounts of the separating phases and are in agreement with the X-ray-diffraction studies of the alloys carried out by Daniel and Lipson (Proc. Roy. Soc., 1943, [A], 181, 287; M.A., 11, 10).
—S. K. L.

M

Zakharova, M. M.

7-6
2
✓ Phosphorocetylation of mercaptans, dialkyl immonophites, and alkylphosphonic acids. A. N. Pudovik and M. M. Zakharova (State Univ., Kazan). *Uchenye Zapiski Kazan. Univ.* 113, No. 3, 3-12 (1955). — To 7 g. $\text{CH}_3\text{CHPO}(\text{OEt})_2$ and 4.6 g. PhSH was gradually added satd. EtONa in EtOH maintaining the temp. below $60-65^\circ$; distn. of the rxn. gave 7.8 g. $\text{PhSCH}_2\text{CH}_2\text{P}(\text{O})(\text{OEt})_2$, b_p $203-4^\circ$, n_D^{20} 1.5270, d_4^{20} 1.1440 (n_D^{20} and d_4^{20} listed for the compds. below). Similarly, 1-methoxy-3-pentene-5-thiol gave 70% $\text{MeOCH}_2\text{CH}_2\text{CH}=\text{CHCH}_2\text{SCH}_2\text{CH}_2\text{P}(\text{O})(\text{OEt})_2$, b_p $185-7^\circ$, 1.4820 , 1.0723 , while 1-ethoxy-3-pentene-5-thiol gave 62% $\text{EtOCH}_2\text{CH}_2\text{CH}=\text{CHCH}_2\text{SCH}_2\text{CH}_2\text{P}(\text{O})(\text{OEt})_2$, b_p $191-2^\circ$, 1.4793 , 1.0499 , and 2-butene-5-thiol gave 65% $\text{MeCH}=\text{CHCH}_2\text{SCH}_2\text{CH}_2\text{P}(\text{O})(\text{OEt})_2$, b_p $120-2^\circ$, 1.4690 , 1.0138 . Similar reaction of 6.3 g. $\text{CH}_3\text{CHP}(\text{O})(\text{OR})_2$ and 5.5 g. PhSH in the presence of EtONa in EtOH gave 7.8 g.

M. M. Zakharova

ZAKHAROVA, M. N.

36-71-3/16

AUTHOR: Pyatygina, K.V., Zakharova, M. N.

TITLE: Advance Computation of Cyclone Center Displacement
(Predvychisleniye peremeshcheniy tsentrov tsiklonov)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii
, 1957, Nr 71, pp. 49-59(USSR)

ABSTRACT: Preliminary evaluation of the trajectories of cyclones and anticyclones is of great importance in weather forecasting. The general theory of displacement of baric centers given by M. I. Yudin is based on equations of atmospheric dynamics where a baric center is characterized by an extreme of pressure. The question is discussed only mathematically. Deflection of wind from the geostrophic and conditions for the latter's existence are examined. Considering the formation and disappearance of surface baric centers, the writer concludes that the speed of displacement of the center mentioned is proportional to the degree of the wind's deflection from geostrophic and inversely proportional to the density of isohyetal lines. By substituting values for surges of heat, statics and continuity, Yudin obtains for the components of geostrophic wind a final equation which he further transformed into a suitable form for calculation.

Card 1/2

POZNER, Viktor Mikhaylovich; KIRINA, Tamara Il'ichna; PORFIR'YEV, Gleb Sergeyevich. Uchastvovani: APRODOVA, A.A.; VISSARIONOVA, A.Ya; ZAKHAROVA, M.M.; KILIGINA, M.L.; KOVIAZINA, M.M.; LUN'YAK, I.A.; MUSINA, K.K.; ORLOVA, I.N.; SAVINOVA, S.I.; YAZLOVA, Ye.N.; TERENT'YEVA, V.D.; FADEYEVA, M.I.; CHERNOVA, Ye.I.; SHEL'NOVA, A.K. TIKHIY, V.N., red.; DAYEV, G.A., ved. red.; GENNAD'YEVA, I.M., tekhn. red.

[Volga-Ural oil-bearing region; Carboniferous sediments] Volgo-Ural'skaya neftenosnaya oblast'. Kamennougol'nye otlozheniya. Leningrad, Gos. nauchn. tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1957. 287p. (Leningrad. Vsesoyuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy no. 112) (MIRA 11:12)
(Volga Valley--Geology, Stratigraphic)
(Ural Mountain region--Geology, Stratigraphic)

ZAKHAROVA, M.N., kand.ped.nauk; ABROSIMOVA, L.L., vrach

Cycling. Zdorov'e 5 no.4:24 Ap '59.

(MIRA 12:4)

(CYCLING)

ЗАХАРОВА, М.Н.

PYATYGINA, K.V.; ZAKHAROVA, M.N.

Calculation of the displacement of cyclone centers. Trudy GGO
no.71:49-65 '57. (MIRA 10:10)

(Cyclones)

GANDIN, L. S.; BAGROVA, Ye.I.; ZAKHAROVA, M.N.; MESHCHERSKAYA, L.V.

Static control of aerological telegrams. Trudy GGO no.151:3-16
'64 (MIRA 17:7)

COMMON ELEMENTS		PROCESSING AND PROPERTIES INDEX	
<p>17</p> <p>Vitamin value of the fruit of <i>Hippophae rhamnoides</i>. V. A. Deryagin and M. P. Zakharenko. <i>Pishchereyskaya Prom.</i> 1944, No. 5/6, 11-14.—The fruits of <i>Hippophae rhamnoides</i> are rich in vitamin C (300 mg. %) and carotene and contain no "ascorbicase." Practically no vitamin C activity is lost in making concentrates. By pressing the seeds an aq. ext. rich in vitamin C and an oil rich in carotene can be obtained. S. Gottlieb.</p>		<p>17</p>	
<p>ASH-51A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>140080 #2</p>		<p>140080 #2</p>	
<p>140080 #2</p>		<p>140080 #2</p>	

MATERIALS INDEX		PROCESSES AND PROPERTIES INDEX	
<p><i>CA</i></p> <p>Determination of 2-methyl-1,4-naphthoquinone in commercial preparations. M. P. Zakharova and V. A. Levyatnin. <i>Doklady Akad. Nauk SSSR</i>, 250:61(1981). The method of Valeur for detg. quinones (<i>Chim. rev. ind. biol.</i> 130, 552(1960)) has been adapted to the detn. of metanilone. Dissolve the sample (less than 100 mg.) in alc. and treat with 20 ml. of concd. HCl mixed with 20 ml. of 95% alc. To the cooled soln. add 20 ml. of 10% KI soln. Titrate the I liberated with 0.1 N $\text{Na}_2\text{S}_2\text{O}_3$. One ml. = 8.6 mg. of $\text{C}_{11}\text{H}_8\text{O}_2$. H. Priestley</p>			
<p><i>Inst. Vitamin Res., Moscow</i></p>			
<p>ASH-11A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>100000 00</p>		<p>100000 00</p>	
<p>100000 00</p>		<p>100000 00</p>	

ZAKHAROVA, M. P.

ZAKHAROVA, M. P. -- "Vitamin E. in Plant Tissues." Sub 26 Jun 52, Inst
of Biochemistry imeni A. N. Bakh, Acad Sci USSR. (Dissertation for the
Degree of Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952

ZAKHAROVA, M.P.

USER

The determination of 2-methyl-1,4-naphthoquinone in its water-soluble derivatives. M. P. ZAKHAROVA and V. A. DROBATINA. *Trudy Vsesoyuz. Nauch. Issledovatel. Vsesoyuz. Inst. 4*, 236-8 (1953).—Dissolve 100-250 mg. in 20-30 ml. distd. H₂O. Add dropwise a 1% H₂O soln. of NaOH or KOH. Filter, wash 2-3 times with H₂O, dissolve in 95% EtOH, transfer to 50-100-ml. volumetric flask with 2-3 washings, add alk. to mark, and use 10-ml. aliquots for detns. as described (cf. C.A. 39, 3221¹). B. S. Levine.

0.5

ZAKHAROVA, M.P.

✓ Conjugated vitamin E-protein complexes. M. P. Zak-
harova, Trudy Vsesoyuz. Nauch. Issledovatel. Vitamin
Inst. 5, 145-9 (1954); Referat. Zhur. Khim., Biol. Khim. MD
1955, No. 10707.—Vitamin E (I) was found in plants in
loose and firm union with proteins. The content of free I
in cabbage is approx. 20%; loosely-combined ether ex-
tractable after alc. denaturation is approx. 60%, and that
firmly bound with protein (etherized) which can be freed
only after alkaline treatment and alc. denaturation is approx.
20%. I can be freed from its union with proteins by hy-
drolytic enzyme activity. The repeated pptn. of protein
with $(NH_4)_2SO_4$ carries down I with the pptd. proteins.
B. S. Levine

ZAKHAROVA, M. P.

Formation and localization of vitamin E in plant. M. P. Zakharova. *Trudy Vsesoyuz. Nauch. Issledovatel. Vitamin. Tsent. 6*, 119-123 (1954).—The formation of vitamin E in lucerne leaves occurs most energetically after max. accumulation of chlorophyll and carotene, while phytin does not appear to be essential. Biosynthesis of vitamin E in sprouting seeds can occur in the dark, in contrast to carotene and chlorophyll formation. However, vitamin E synthesis is generally stimulated by light. G. M. Karolavskii.

ZAKHAROVA, M.P.

✓ The antioxidative properties of vitamin E. M. P. Zakharova. *Trudy Vsesoyuz. Nauch. Issledovatel. Vitaminy*. 1955, No. 107/5. — That tocopherol (I) stabilizes carotene (II) dissolved in fat against oxidation was demonstrated by tests with corn and sunflower seed oil and with lard. The addition of I to lard helps to preserve II, and depends upon the quantity of I added. After 45 days in the presence of 75 mg. % of I at 30° II decreased from 164 to 80 mg. %; in the presence of 100 mg. % of I, II was reduced to 100 mg. % and with of 125 mg. % of I, II decreased to only 110 mg. %. If no. I is present II disappears almost completely in 2 days at 30°. — R. S. Levige. MD

ЗАКАРОВА, М. П.

Content of vitamin E in some food products. M. P. Zakharova. *Trudy Vsesoyuz. Nauch.-Issledovatel. Vitamin. Inst.* 5, 178-82 (1964). -- Examn. of a large variety of common food products showed that vitamin E content is highest in leafy green vegetables (5-18.7 mg. %) and wheat-germ oil (180-250 mg. %). Normal varied human diet appears to be amply adequate.

G. M. Kozlov

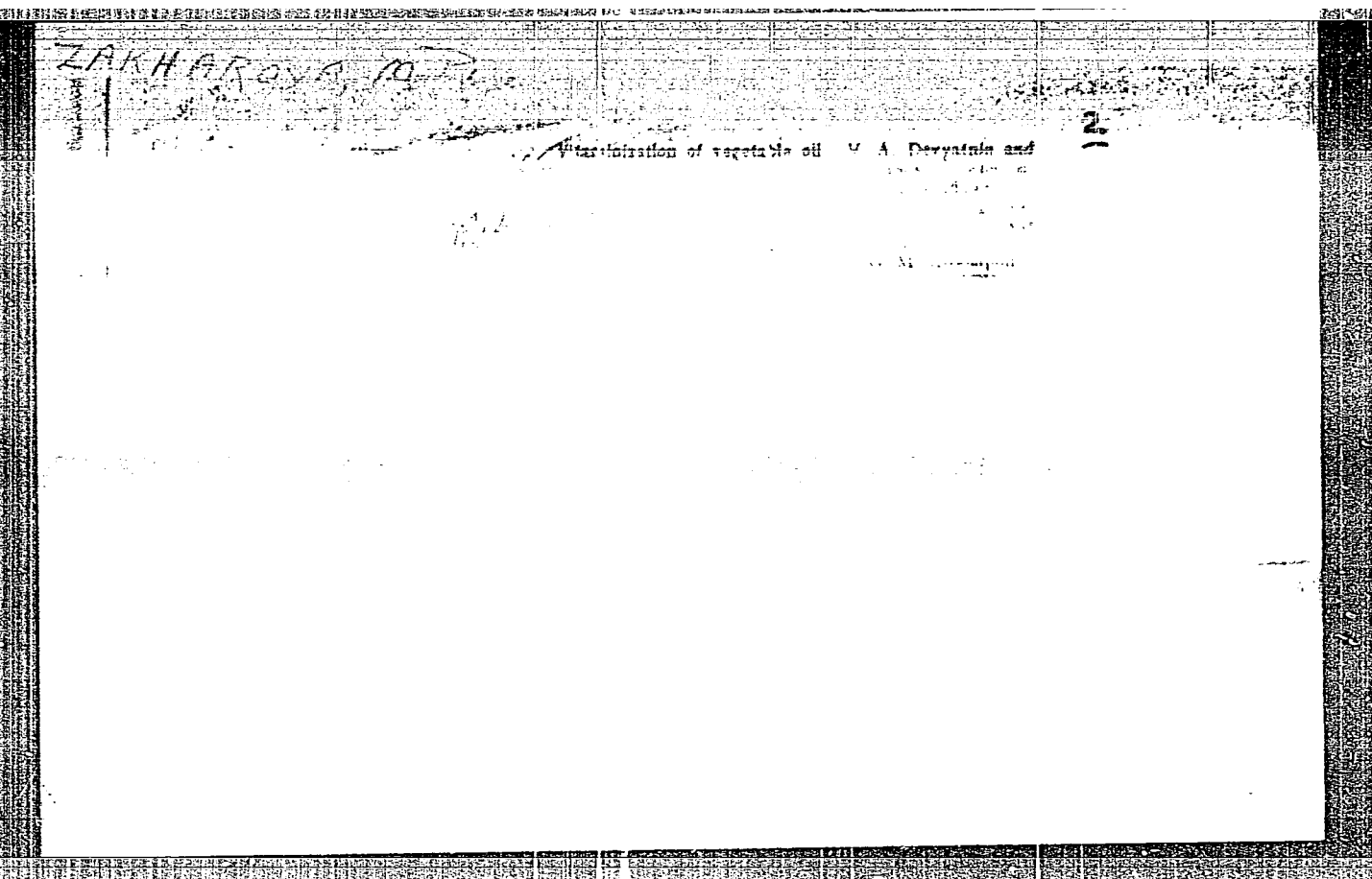
1

ZAKHAROVA, M. P.

Properties of fatty oil from dog-rose seeds. V. A. Dev.
 yields a red-brown oil, d. 0.9328, f.p. -12°, n_D²⁰ 1.4805,
 n_D²⁵ 1.4605, n_D³⁰ 1.4508. The oil contains 3.9 mg
 K₂CO₃ per g. oil. The oil is stable at 100°C for 24 h.
 The oil is gradually destroyed in storage in the oil.
 G. M. Kosolapoff

Med

2



MARTINSON, Ye.N.; ZAKHAROVA, M.P.; ALASHKEVICH, M.L.; KHOZHLOV, I.M.;
KHOZHLOV, I.M.; SHIRYAYEV, A.G.; KASTORNYKH, M.S.

Obtaining vitamin E concentrates by means of high-vacuum distil-
lation. Trudy VNIVI 6:75-81 '59. (MIRA 13:7)
(DISTILLATION) (TOCOPHEROL)

ZAKHAROVA, M.P.; KASTORNYKH, M.S.

Isolation of tocopherols by chromatography. Trudy VNIIV 6:
88-92 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Biokhimicheskaya laboratoriya.
(TOCOPHEROL)

NIKOLAYEV, R.P.; ZAKHAROVA, M.P.; ROMANOVA, A.F.

New preparations of vitamins A, D, and B₁₂ for feeding purposes.
Trudy VNIVI 6:137-144 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Biokhimicheskaya laboratoriya.
(VITAMINS)

NIKOLAYEV, R.P.; ZAKHAROVA, M.P.; ROMANOVA, A.F.

Dry, highly dispersed, stable preparations of fat-soluble
vitamins for prophylactic and therapeutic purposes. Trudy
VNIVI 6:144-147 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Biokhimicheskaya laboratoriya.
(VITAMINS)

ZAKHAROVA, M.P.

Vitamin B₁₂ from waste water. Trudy VNIIV 6:151-157 '59.
(MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Biokhimicheskaya laboratoriya.
(CYANOCOBALAMINE)

ZAKHAROVA, M.S.

Action of various antibiotics on whooping-cough bacteria.
M. S. Zakharova and L. A. Ponomareva (N. F. G. med.
and pharm. inst. of Moscow Univ., Moscow, U.S.S.R.).
Moscow. *Zh. Mikrob. i Epidemiol. i Immun. Biol.*
1954, No. 3, 7-7. - Biomecin, 0.4% per ml., and levomyce-
tin, 4.3-9.1% per ml. of synthetic media, inhibit growth of
whooping-cough bacteria. Whooping-cough infection in
mice can be prevented if either antibiotic is administered
immediately or on the day following infection twice daily in
doses of 0.2 g. for 10-11 days. The duration of treatment
by biomecin can be shortened to 5 days if administered 2
days before infection and 3 days after. Biomecin effective-
ness is greatly reduced if administered 6 days after infection.
J. A. Stekol.

ZAKHAROVA, M.S.

POPOVA, L.M.; ZAKHAROVA, M.S.

Chronic tick-borne encephalitis; experimental observations. Zhur.
mikrobiol. epid. i immun. no.10:54-58 0 '54. (MLRA 8:1)

1. Iz Instituta nevrologii AMN SSSR (dir. prof. N.V.Kononov) i
iz otdela virologii Instituta epidemiologii i mikrobiologii imeni
pochetnogo akademika N.F.Gamalei AMN SSSR (dir. prof. V.D.Timakov)
(ENCEPHALITIS, EPIDEMIC, experimental,)

ZAKHAROVA, M.S.; LAPAYEVA, I.A.

Serological study of protective ultrasound-treated sorbed
whooping cough antigen. Zhur. mikrobiol., epid. i immun.
33 no.11:110-115 N '62. (MIRA 17:1)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

ZAKHAROVA, M. S.

"Experimental Study of a Vaccine Against Whooping Cough." Proceedings of
Inst. Epidem and Microbiol im. Gamaleya 1954-56.

Other Personnel Identified as Participants in Sessions of the Institute's
Scientific Council Held During 1955. Inst. Epidem and Microbiol im. Gamaleya
AMS USSR

SO: Sum 1186, 11 Jan 57.

ZAKHAROVA, M. S.
USSR/Medicine - Whooping cough

FD-2310

Card 1/1 Pub 148 - 11/36

Author : Zakharova, M. S.; Dadash'yan, M. A.; Bostrem, G. G.; Pospelova,
~~L. A.~~

Title : Application of biomycin for the treatment of patients with whoop-
ing cough

Periodical : Zhur. mikro. epid i immun. No 2, 34-37, Feb 1955

Abstract : Describe favorable results obtained in the therapy with biomycin
of whooping cough affecting children. One reference, USSR, since
1940. Two tables.

Institution : Division of Children's Infectious Diseases, 2 d Moscow Medical
Institute imeni I. V. Stalin; Institute of Epidemiology and Micro-
biology imeni N. F. Gamaleya, Academy Medical Sciences USSR

Submitted : July 8, 1954

ZAKHAROVA M. S.

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

Author : Zakharova, M. S. Palkina, N. A.

Inst : Not given

Title : A Nutrient Medium for Cultivation of Whooping
Cough Microbes

Orig Pub : Materialy po obmeny opytom. Gl. upr. in-tov
vaksin i syvorotok M-va zdravookhr. SSSR,
1956, 2/52, 45-49

Abstract : Technical, acidic, first grade (GOST No.1211-
41) casein is washed off with a 0.2% solution
of acetic acid for 6-7 days, changing the
solution 2-3 times daily, rinsed with distilled
water, pressed out, and dried under 60-70°.
In a glass container, 400 g. of casein, 400 ml.

Card 1/5

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

of chemically-pure hydrochloric acid, and 200
ml. of distilled water are mixed. The mixture
is autoclaved for 3 hours under 127°. After
autoclaving, the hydrolysate is diluted with
distilled water to twice the volume, filtered
through paper, diluted again by activated carbon:
20 g. of carbon (activated, ligneous illuminat-
ing, Type A, GOST 4453-48) to 1 l. The mixture
is boiled for 10 min. and filtered through
linen. From 400 g. of casein, about 5 l. of
hydrolysate are obtained, which may be pre-
served for a long time with 1% of chloroform
under 5-7°. Yeast dialysate is prepared from
fresh-bread pressed yeast. 1 kg. of yeast is

ZAKHAROVA, M.S.

LEBEDEV, D.D.; DADASH'YAN, M.A.; ZAKHAROVA, M.S.

Epidemiological effectiveness of whooping cough vaccine. Vop. okh.
mat. i det. 2 no.4:3-6 JI-Az '57. (MLRA 10:9)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gemalei
AMN SSSR (dir. S.N.Murontsev) i II Moskovskogo gosudarstvennogo
meditsinskogo instituta imeni N.I.Priogova (dir. O.V.Kerbikov)
(WHOOPIING COUGH--PREVENTIVE INOCULATION)

ZAKHAROVA, M.S., red.; ZUYEVA, N.K., tekhn.red.

[Specific prevention of whooping cough; works of a conference held jointly with research and practice institutions, March 5-6, 1958]. Spetsificheskaya profilaktika kokliusha; trudy nauchnoi konferentsii, provedennoi sovместно s nauchno-issledovatel'skimi i prakticheskimi uchrezhdeniyami 5-6 marta 1958 g. Pod red. M.S. Zakharovoi. Moskva, Gos.izd-vo med.lit-ry, 1958. 189 p.

(MIRA 13:4)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut epidemiologii i mikrobiologii. 2. Institut epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR (for Zakharova).

(WHOOPING COUGH)

ZAKHAROVA, M. S.

Specific Prevention of Pertussis, published by MEDIZ. MEDICIN, 1950
 ed. by M. S. Zakharova, M. S. Zakharova, M. S. Zakharova, M. S. Zakharova,
 Inst. Hyg., and Microbiol. in S.F. Gorbachev,
 Inst. Hyg., and Microbiol. in S.F. Gorbachev, 1950

At the scientific conference on the specific prophylaxis of pertussis conducted by
 the Institute of Epidemiology and Microbiology in S.F. Gorbachev, and Medical Inst.
 together with other Institutes and national establishments, papers were read by
 the following: (see Table of Contents)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| M. S. Zakharova (Inst. of Hyg. and Microbiol. in S.F. Gorbachev) | 3 |
| E. V. Gerdienko (Inst. of Hyg. and Microbiol. in S.F. Gorbachev): Effectiveness of pertussis immunization in epidemiologic observations | 13 |
| M. A. Rodash'yan (Zhd Moscow Med. Inst. in S. I. Pirogov): Clinical-epidemiologic effectiveness of the pertussis vaccine in epidemic | 29 |
| A. V. Sitakova (Inst. of Pediatrics and MBH): Clinical study of reactions in children vaccinated with pertussis vaccine | 37 |
| T. G. Filasova et al. (Ukr Inst. of Epidemiol. Microbiol. and Hygiene and Inst. for the Care of Mothers and Children of the Ukrainian SSR): Study of the effectiveness of immunization against pertussis | 45 |
| T. G. Kozlovskaya and E. I. Prodanova (Central Scientific Res. Lab. of Hygiene and Epidemiology of the Ministry of Communications MBH): Effectiveness of vaccination with pertussis vaccine among infants in the Moscow Railroad by Survey | 53 |
| T. G. Gerasimova et al. (Charlsey Scientific Res. Inst. for Vaccines and Sera): Effectiveness of vaccination against pertussis in epidemiologic observation | 59 |
| E. V. Gerdienko and T. P. Kuznetsova (see above): Epidemiologic effectiveness of pertussis-diphtheria vaccination | 65 |
| L. A. Semakova (Republican Sanitary-Epidemiologic Station of the Ministry of Health of the Georgian SSR): Epidemiologic and immunologic effectiveness and reactogenicity of the pertussis-diphtheria vaccine | 70 |
| I. P. Vasil'yeva et al. (Tashkent Scientific Res. Inst. for Vaccines and Sera): Reactogenicity and epidemiologic effectiveness of diphtheria-pertussis-diphtheria and pertussis vaccine | 87 |
| E. A. Buzikova (Leningrad Inst. of Epidemiol. Microbiol. and Hygiene and Inst. for the use of pertussis and pertussis-diphtheria vaccine in children): Substitution of the National Transport System | 93 |
| T. A. Zaitseva (Republican Sanitary-Epidemiologic Station of the Moldavian SSR): Study of reactogenicity and epidemiologic effectiveness of pertussis and pertussis-diphtheria vaccine | 103 |
| E. S. Zakharova et al. (see above and Lab. of Anticancer structures of the Academy of Sciences MBH): Methods for preparation and experimental study of the fundamental biological properties of protective antigens of the pertussis organism | 112 |

Country : USSR F
Category : Microbiology-Microbes Pathogenic for Man and Animal
Abs. Jour : Ref Zhur - Biol., No.19, 1958, 86116
Author : Lebedev, D.D.; Zakharova, H.S.; Dadash'yan, M.A.
Institut. : -
Title : The Use of Pertussis Vaccine in Foci

Orig Pub. : Zh. Mikrobiol., Epidemiol., i Immunobiol., 1958,
No.3, 62-65
Abstract : no abstract

Card: 1/1

-32-

ZHDANOV, V.M., red.; VASHKOV, V.I., red.toma: V redakt.toma prinimali uchastiye: ZAKHAROVA, N.S.; KUDLAY, D.G.; PAVLOV, P.V.; HUDNEV, G.P.; TIMAKOV, V.D.; TROITSKIY, V.L.; KHRISTOV, L.N.; NIECHAYEV, S.V., red.; BEL'CHIKOVA, Yu.S., tekhn.red.

[Proceedings of the 13th All-Union Congress of Hygienists, Epidemiologists, Microbiologists, and Specialists in Infectious Diseases, Moscow, 1956] Trudy Vsesoiuznogo s"yezda gigenistov, epidemiologov, mikrobiologov i infektsionistov.. Pod red. V.M. Zhdanova. Moskva, Gos.izd-vo med.lit-ry. Vol.2. [Section on epidemiology, microbiology, infectious diseases and the organization of public health service] Otdelenie epidemiologii, mikrobiologii, infektsionnykh boleznei i organizatsii zdравo-okhraneniia. Pod red. V.I.Vashkova. 1959. 866 p. (MIRA 12:11)

1. Vsesoyuznyy s"yezd gigenistov, epidemiologov, mikrobiologov i infektsionistov. 13th, Moscow, 1956.
(MICROBIOLOGY--CONGRESSES)

ZHDANOV, V.M., red.; VASHKOV, V.I., red.; ZAKHAROVA, M.S., red.;
KUDLAY, D.G., red.; PAVLOV, P.V., red.; RUDNEV, G.P., red.
(Moskva); TIMAKOV, V.D., red. (Moskva); TROITSKIY, V.L., red.;
KHRISTOV, L.N., red. (Moskva); NECHAYEV, S.V., red.;
BIL'CHIKOVA, Yu.S., tekhn.red.

[Transactions of the All-Union Conference of Hygienists, Epidemio-
logists, Microbiologists, and Infections Disease Specialists]
Doklady XIII Vsesoiuznogo s"ezda gigenistov, epidemiologov, mikro-
biologov i infektsionistov. Pod red. V.M.Zhdanova. Moskva, Gos.
izd-vo med.lit-ry Medgiz. Vol.2. [Section on epidemiology, micro-
biology, infectious diseases, and the organization of the public
health system] Otdelenie epidemiologii, mikrobiologii, infektsion-
nykh boleznei i organizatsii zdravookhraneniia. Pod red. V.I.
Vashkova. 1959. 866 p. (MIRA 14:1)

1. Vsesoyuznyy s"ezd gigiyenistov, epidemiologov, mikrobiologov
i infektsionistov. 13th.

(EPIDEMIOLOGY--CONGRESSES]

ZAKHAROVA, M. S.

"Experimental study of the immunogenic properties of preparations
obtained from pertussis microorganisms."

Report submitted at the 13th All-Union Congress of Hygienists,
Epidemiologists and Infectionists. 1959

ZAKHAROVA, M.S., prof.

Principal results of research and chief problems in the field
of specific prevention of whooping cough. Vest. AMN SSSR 15
no. 5:33-43 '60. (MIRA 13:9)

1. Institut epidemiologii i mikrobiologii im. Gamalei AMN SSSR.
(WHOOPING COUGH)

ZAKHAROVA, M.S.; DADASH'YAN, M.A.

Reaction potential of associated vaccines. Vest. AMN SSSR 15
no. 10:35-39 '60. (MIRA 14:4)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei AMN
SSSR.

(VACCINES) (WHOOPING COUGH) (DIPHTHERIA)

ZAKHAROVA, M.S.; FAN'KOVSKAYA, E.K.

Use of a dry casein-carbon agar culture medium in the bacteriological diagnosis of whooping cough. Zhur. mikrobiol. epid. i immun. 32 no.7: 134-137 Je '61. (MIRA 15:5)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(WHOOPING COUGH)
(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

ZAKHAROVA, M.S., LAPAYEVA, I. STEPANOVA, E.A.

The preparation and study of borrelia pertussis protective antigen.

Report submitted to the Intl. Congress for Microbiology
Montreal, Canada 19-25 Aug 1962

ZAKHAROVA, M.S.

Whooping cough and the prospects for its eradication in the country. Vest. AMN SSSR 17 no.2:77-81 '62. (MIRA 15:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

(WHOOPING COUGH)

SEDLOVETS, M.P., kand.med.nauk; ZAKHAROVA, M.S., uchastkovyy vrach

Clinical aspects and treatment of typhoid fever from the data of a rural district hospital. Sov.med. 26 no.6:86-92 Je '62.

(MIRA 15:11)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. K.V.Bunin)
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sechenova i uchastkovoy bol'nitsy (glavnyy vrach A.I.Zakharov)
sela Ot'yassy Sosnovskogo rayona Tambovskoy oblasti.

(TYPHOID FEVER)

GORDINA, R.V.; ZAKHAROVA, M.S.; OSTROUKHOVA, D.I.; KURAGINA, R.V.

Data on the reactogenicity of pertussis-diphtheria-tetanus vaccine.
Zhur. mikrobiol., epid. i immun. 40 no.9:14-18 S'63.

(MIRA 17:5)

1. Kraunodarskaya krayevaya sanitarno-epidemiologicheskaya stantsiya.

ZAKHAROVA, H.S.; SAPOZHNIKOV, I.I.; BELYAKOV-BODIN, V.I.

Cybernetic analysis of some data of immunoepidemiological studies. Zhur.mikrobiol., epid. i immun. 42 no.12:16-20 (MIRA 1981)
D '65.

1. Institut epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

LATYAROVA, M.S.

Urgent problems of specific prophylaxis of cholera; cough.
Vest. AMN SSSR 19 no.3:36-43 '64. (MIRA 12:4)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei
AMN SSSR, Moscow.

FCRUBINOVSKAYA, N.M.; ZAKHAROVA, M.S.; FURMAN, M.A.

Experience in the diagnosis of diseases caused by Mycoplasma pneumoniae. Vest. AMN SSSR 20 no.8:82-86 '65. (MIRA 18:9)

1. Institut epidemiologii i mikrobiologii imeni N.F.Camalei AMN SSSR, Moskovskiy garnizonnyy gosptal' i Tsentral'nyy institut usovershenstvovaniya vrachev.

ZAKHAROVA, M.S.; PANOVA-STOYANOVA, O.P.

Species-specific antisera for representatives of the *Escherichia* genus. Zhur. mikrobiol., epid. i immun. 42 no.6:60-64 '65.

(MIRA 18:9)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei
AMN SSSR i Nauchno-issledovatel'skiy institut epidemiologii i
mikrobiologii Narodnoy Respubliki Bolgarii.

SIRMENOVA, Ye. T., ZAKHAROVA, M. S.

Study of the interaction of *Bordetella pertussis* and parainfluenza
with tissue cultures. Report No. 2: Coproduction of *Bordetella*
pertussis and parainfluenza in a system with chick embryo fibro-
blasts. Zhur. mikrobiol., epid. i immun. 42 no. 3: 81-88 May '65.
(MIRA 18:6)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AN SSSR.

SHMELEVA, Ye.I.; ZAKHAROVA, M.S.

Study of the interaction of Hemophilus pertussis and Hemophilus parapertussis with tissue cultures. Report No.1: Comparative sensitivity of various tissues to Hemophilus pertussis and Hemophilus parapertussis. Zhur. mikrobiol., epid. i immun. 41 no.11:18-23 '65. (MIRA 18:5)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

CORDINA, R.V.; ZAKHAROVA, M.S.; OSTROUKHOVA, D.I.; KURAGINA, R.V.; KORASHEVICH, V.P.

Epidemiological effectiveness of pertussis-diphtheria-tetanus
vaccination. Zhur.mikrobiol., epid.i immun. 40 no.12:9-13 D '63.
(MIRA 17:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR
i Sanitarne-epidemiologicheskoy stantsii Krasnodarskogo i Stavropol'-
skogo krayev.

ZAKHAROVA, M.S.; BAYEVA, Ye.A.; STEPANOVA, N.A.

"titration of diphtheria and tetanus antitoxins in small quantities of
blood. Zhur.mikrobiol.,epid.i immun. 40 no.12:68-72 1963.

(MIRA 17:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

ZAKHAROVA, M.V.

SKUTEL'SKIY, N.M.; ZAKHAROVA, M.V.

Practice in decreasing morbidity causing temporary disability. Sov.
zdrav. 16 no.11:20-23 N '57. (MIRA 11:1)

1. Glavnyy vrach Tumanovskoy rayonnoy sanitarno-epidemiologicheskoy
stantsii (for Skutel'skiy). 2. Zaveduyushchiy meditsinskim punktom,
Smolenskaya oblast' (for Zakharova)

(VITAL STATISTICS

morbidity statist. of dis. with temporary loss of working
capacity in Russia (Rus))

(INDUSTRY AND OCCUPATIONS,
same)

NI, L.P.; ZAKHAROVA, M.V.; PONOMAREV, V.D.

Investigating potassium aluminosilicates formed in the system
 $K_2O - Al_2O_3 - SiO_2 - H_2O$ at 90°C. Trudy Inst. met. i .bog.
AN Kazakh SSR 11:38-43 '64. (MIRA 18:4)

STEPANOV, B.I.; ZAKHAROVA, M.V.

Relation between dye composition and color properties. Part
2. Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.2:117-124 '59.

(MIRA 12:6)

1. Moskovskiy khimiko-tekhnologicheskii institut im. D.I. Mendeleeva.
(Dyes and dyeing--chemistry)

STEPANOV, B.I.; ZAKHAROVA, M.V.

Relation between the structure of dyes and color properties.

Izv.vys.ucheb.sav.; tekhn.tekst.prom. no.1:148-157 '59.

(MIRA 12:6)

1. Moskovskiy khimiko-tekhnologicheskii institut im. D.I.
Mendeleeva.

(Dyes and dyeing--Wool)

PREDVODITELEV, A.A.; ZAKHAROVA, M.V.

Strength of cadmium and zinc whisker crystals. Fiz. tver. tela 7
no.2:379-386 F '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ACCESSION NR: AP4028434

S/0181/61/006/004/1032/1088

AUTHORS: Shvidkovsky, Ye. G.; Predvoditelev, A. A.; Zakharova, M. V.

TITLE: Conditions for growing cadmium whiskers by vapor condensation

SOURCE: Fizika tverdogo tela, v. 6, no. 4, 1964, 1032-1088

TOPIC TAGS: whisker, acicular crystal, crystal growth, crystal synthesis, artificial crystal, cadmium, vapor condensation, argon atmosphere

ABSTRACT: This paper contains experimental results regarding the effect of argon pressure on the growth of cadmium whiskers. A method is proposed for computing the vapor oversaturation in the growing tube at which whisker formation begins. The method of crystal growing employed is described in various places in the literature (G. W. Sears. Acta Met., 3, 367, 1955; E. M. Nadgornyy). On growing the crystals, the author noted a characteristic distribution of condensate along the growing tube. At first, condensation took place at the crystallization temperature of cadmium (320C) at all pressures. Exceptions were observed when the growing tube was not filled with argon (residual pressure, 10^{-6} mm Hg). The interval of growth at all vapor pressures from 10 to 600 mm Hg covered about 20-25C and lay at

Card 1/2

ACCESSION NR: AP4028434

295-3200, but a change in argon pressure caused a change not only in the form of the whisker but also in the time of growth. At low pressures the numbers and sizes of crystals were much greater. Results show that a constant Cd vapor oversaturation produces acicular crystals at any inert-gas pressure; the pressure merely modifies the rate of crystal growth, increasing or decreasing the diffusion rate of cadmium atoms to the growing crystal. Computations show that the whisker crystals begin to grow at a vapor oversaturation of 0.17, which is a lower value than the 0.4 recorded by P. B. Price (Phil. Mag., 5, 473, 1960). Orig. art. has: 5 figures, 1 table, and 7 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 17Oct63

DATE ACQ: 27Apr64

ENCL: 00

SUB CODE: PH

NO REF SOV: 004

OTHER: 009

Card 2/2

NI, L.P.; ZAKHAROVA, M.V.; PONOMAREV, V.D.

Behavior of alumina in potassium aluminate solutions at 90° C.
Trudy Inst. met. i obog. AN Kazakh. SSR 9:76-84 '64.
(MIRA 17:9)

L 59598-65 ENT(m)/EPF(c)/ENP(j)/ENP(t)/ENP(b) Pc-4/Pr-4 IJP(c) JD/PM
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 542-957.+546.811.+546.711.717
 29
 28
 B

ACCESSION NR: AP5017968

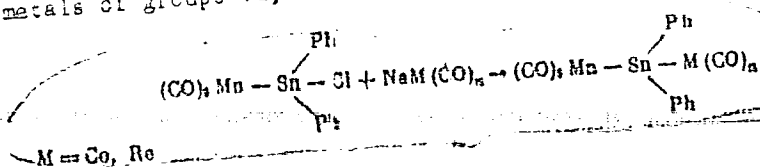
AUTHOR: Nesmeyanov, A. N.; Anisimov, K. N.; Kolobova, N. Ye.; Zakhurova, M. Ya.

TITLE: Polymetallic compounds of tin with metal carbonyls

SOURCE: AN SSSR. Izvestiya. Seriya: khimicheskaya, no. 6, 1965, 1122

TOPIC TAGS: organotin compound, metal carbonyl

ABSTRACT: The authors obtained new polymetallic compounds of tin with the carbonyls of metals of groups VI, VII, and VIII according to the reaction

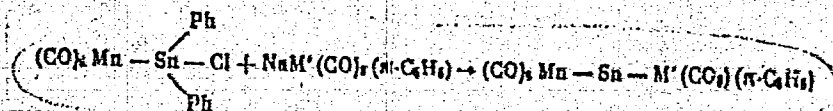


or

Card 1/2

L 59598-65

ACCESSION NR: AP5017968



B

This was followed by hydrochlorination and the separation of the corresponding halo derivatives, which are tabulated. Orig. art. has: 1 table and 2 formulas.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 23Apr65

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card *RR*
2/2

1.005-65 EWT(1)/EWP(e)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EEC(b)-2/EWP(b)/EWA(c)
LJP(c) JD

ACCESSION NR: AP5005271

S/0181/65/007/002/0379/0386

AUTHOR: Predvoditelev, A. A.; Zakharova, M. V.

TITLE: Concerning the strength of whisker crystals of cadmium and zinc

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 379-386

TOPIC TAGS: filamentary crystal, cadmium, zinc, strength, dislocation density

ABSTRACT: The cadmium and zinc whiskers were grown by condensation from vapor, using a method described previously by the authors (with Ye. G. Shvidkovskiy, FTT, v. 6, 1082, 1964). The strength of the whiskers was measured with a special set-up built in accordance with a scheme described by H. B. M. Wolters et al (J. Sci. Inst., v. 38, 250, 1961). The load was measured with a ring dynamometer. The cross section area, necessary to determine the strength, was obtained by photography at large magnification, using the MJF-2 microscope. The diffraction effect on the edges were reduced by using ultraviolet light. The reduction of the experimental data by least squares has shown that for cadmium in the range of diameters 1--50 μ the strength is equal to $1.7 + 211/d^2$ (kg/mm²), where d is the diameter in microns. In the case of zinc in the range of diameters 1--80 μ , the strength is

Card 1/2

L 34895-65

ACCESSION NR: AP5005271

2

$9 + 127/d^2$. Thus, unlike many other metals, the strength is proportional to the reciprocal of the diameter squared, and not to the reciprocal of the diameter. The values obtained for the strength are compared with the theoretical shear strength, and the possible effect of axial dislocations on the strength of whiskers is also discussed. It is assumed that the start of plastic flow is connected with the axial dislocations and their quantity, then the strength should be proportional to $1/d^2$, since the number of dislocations in whiskers is approximately proportional to $1/d^2$. It is also possible that this behavior is peculiar to zinc and cadmium only. "The authors are deeply grateful to Professor Ye. G. Shvidkovskiy for assistance in the results." Orig. art. has: 8 figures, 1 formula, and 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova. (Moscow State University)

SUBMITTED: 07Jul64

ENCL: 00

SUB CODE: 88

NR REF SOV: 009

OTHER: 021

Card 2/2

NESMEYANOV, A.N., akademik; ANISIMOV, K.N.; KOLOBOVA, N.Ye.; ZAKHAROVA,
M. Ya.

Bimetallic derivatives of the carbonyls of chromium, molybdenum,
and tungsten. Dokl. AN SSSR 156 no. 3:612-615 '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

LUPPOVA, N.N.; ZAKHAROVA, M.Z.

Republic conference of malarialogists in Shumerlia District of the Chuvash
A.S.S.R. Med.paras.i paras.bol. no.5:479 S-0 '53. (MLA 6:12)
(Chuvash A.S.S.R.--Malarial fever) (Malarial fever--Chuvash A.S.S.R.)

S/661/61/000/006/047/081
D244/D302

AUTHOR: Baranovskaya, N. B., Berlin, A. A., Zakharova, M. Z. and
Mizikin, A. I.

TITLE: Vulcanization of polydimethyl siloxanes at room tempera-
ture

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh
soyedineniy; trudy konferentsii, no. 6: Doklady, diskus-
sii, resheniye. II Vses. konfer. po khimii i prakt. prim.
kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR,
1961, 208-210

TEXT: This is a discussion in which S. N. Borisov (VNIISK, Lenin-
grad), Z. N. Nudel'man (NIIRP, Moscow), I. K. Stavitskiy (VNIISK,
Leningrad) and K. A. Rzhendzinskaya (VNIISK, Leningrad) took part.
The authors disclosed that the cold vulcanizates preserve their
elasticity at 200°C for 200 hours. At 300 - 350°C their working pro-
perties deteriorate. This applies to the rubbers containing TiO_2

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Vulcanization of polydimethyl...

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D244/D302

and ZnO. The scheme of vulcanization proposed by the authors agrees well with experimental data; in particular, it explains the influence of the structure of organic tin compounds on their catalytic action. In addition, the character of the vulcanization process, its development and the presence of induction period can be explained by postulating the formation of intermediate complex. The swelling property of the "cold" vulcanized polymer, investigated in toluene, was the same as that of the "hot" vulcanized rubber. The viability period of the mixtures decreases with the rate of vulcanization.

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Card 2/2

AUTHORS: Baranovskaya, N. B., SOV/20-122-4-17/57
Zakharova, M. Z., Mizikin, A. I., Berlin, A. A.

TITLE: Catalytic Solidification of Polydimethylsiloxane
at Room Temperature (Kataliticheskoye otverzhdeniye
polidimetilsiloksana pri komnatnoy temperature)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 4, pp 603-606
(USSR)

ABSTRACT: It is known that the transformation process of linear and
branched alkylpolysiloxanes takes place in a non-fusible and
insoluble state at 200-250° and demands a longer time. This
fact complicates the process and limits the range of use of
the silicon organic polymers considerably. Since nothing worth
mentioning could be found in the publications (except the
Refs 1, 2 for silastic /silastik/RTV) the authors decided to
exploit the interaction between hydroxyl groups of the linear
polydimethylsiloxanes and the alkoxy groups of the
polyfunctional silicon organic monomers in order to produce
tri-dimensional alkylpolysiloxanes. Such a formation method
of transverse siloxane compounds is more favorable from the
energetic point of view than the stripping of the hydrogen

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at Room Temperature

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or of an alkyl radical from the polymeric chain (in the case of a common thermal vulcanization) and could therefore pass at much lower temperatures. The authors investigated the catalytic activity of some orthotitanic acid esters (ethyl-, propyl-, and butyl ester) in order to find effective accelerators for this purpose. Furthermore they investigated a number of tin organic compounds (mostly of the group of the dialkyl tin which contained acetyl, capryl, and stearyl). The caprylates and stearates were synthesized for the first time. The phenomenon of cold vulcanization of liquid and rubber-like polydimethylsiloxanes was expressed in all cases by a gradual increase of the viscosity and the shear stress of the polymer, its elastic properties increased, its solubility was, however, reduced. Figures 1 and 2 show curves which illustrate the change of the shear stress (η) and recovery of the polymer under the influence of the organotin and organotitanium compounds. Table 1 shows some properties of the vulcanizates. The measurement results show a great change of the vulcanization process according to the type of the used organometallic compound: orthotitanic acid ester or an organotin compound (Figs 3 and 4). The observed rules can be

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at Room Temperature

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explained by the formation of an active complex (scheme page 606). The method of "cold" vulcanization worked out by the authors may be applied for the production of rubber material, cast combinations, rubber-soaked tissues, coats, and compounds which can be solidified at room temperature. The rubbers thus produced have much better properties than rubber of the same composition which was vulcanized according to the method used hitherto. Ye. N. Zil'berman, N.A. Rybakova, O. V. Nogina assisted in this paper. There are 4 figures, 2 tables, and 4 references, 1 of which is Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut aviatsionnykh materialov (All Union Scientific Research Institute of Airplane Material)

PRESENTED: April 28, 1958, by A. V. Topchiyev, Member, Academy of Sciences, USSR

SUBMITTED: April 28, 1958
Card 3/4

ZAKHAROVA, M. Z.

N. B. Baranovskaya, A. A. Berlin, M. Z. Zakharova and A. I. Mizikin, "The Vulcanization of Liquid and Rubber-like Polydimethylsiloxanes at Room Temperature."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1959.
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

COUNTRY : USSR
CATEGORY : Farm Animals. Sheep Q
ABS. JOUR. : RZBiol., No. 13, 1958, No. 59558
AUTHOR : Sledzovskaya, T.; Zakharova, N.
INST. : -
TITLE : Winter Lambing of Sheep
ORIG. PUB. : Kolkhoznoye proiz-vo, 1957, No 12, 25-26
ABSTRACT : No abstract.

CARD: 1/1

Q - 49

ZAKHAROVA, N.A.

Brief results of phenological observations on maples at the
botanical garden of the Moscow University. Vest. Mosk. un.
Ser. 6: Biol., pochv. 16 no.1:59-66 Ja-F '61. (MIRA 14:4)

1. Botanicheskiy sad Moskovskogo universiteta.
(MOSCOW---MAPLE) (PHENOLOGY)

CA ZAKHAROVA, N.A.

11 G

isoelectric point and coagulation threshold of proteins of
serums of cancer patients. M. I. Ravich-Shcherbo and
N. A. Zakharova (State Med. Inst., Kursk). *Arkh. Patol.*
13, No. 2, 84-8 (1961). — The isoelec. point of normal serum
is pH 5.20; that of cancer patients 6.77-7.39. The coagu-
lation threshold for normal persons is 2.5-3.5 ml. of elec-
trolyte (10^{-4} M CuSO_4), while in cancerous cases it is 0.8-
1.2 ml. Very distinct coagulation occurs at 7-7.2 ml. and
4.0-4.6 ml., resp. G. M. Kosolapoff

— Dept. Org. & Biol.
Chem.
Kursk State Med.
Inst.

ZAKHAROVA, N.A.; PORAY-KOSHITS, B.A.; EFROS. L.S.

Investigation in the field of imidazole derivatives. Part 10. Acylation of 2-oxyethylbenzimidazole and products of its methylation. Zhur.ob. (MLBA 6:7)
Khim. 23 no.7:1125-1230 Jn '53.

1. Insitut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR.
(Imidazole derivatives)

Zakharova N. A.

Esters of amino alcohols and disubstituted glycolic acids.
 N. V. Khromov-Borsov and N. A. Zakharova. *Zhar. Obshchest. Khim.*, 25, 2132-6 (1955). — α -(CH₂)_nCO(OH)CO₂H (I), with Et₃N(CH₂)_nCl yields some 8-fluorenil. The following compds. were prepd. by heating the corresponding acid with equimolar amts. of RCl in PhMe or PhCl 4 hrs. at 110-20° (compd., % yield, m.p. of HCl salt given):
 PhC(OH)CO₂R' (R' = CH₂CH₂NEt₃), 81.6, 174-5°;
 PhC(OH)CO₂R'' (R'' = CH₂CH₂NMe₃), 83.2, 160°;
 R'''PhC(OH)CO₂R', (R''' = 2-furyl), 76.9, 143.5°, R''';
 PhC(OH)CO₂R'', 63.1, 177.5-8°; (4-MeOC₆H₄)₂C(OH)CO₂R', 87.1, 167°; (4-MeOC₆H₄)₂C(OH)CO₂R'', 63.4, 191-2°; 4-MeOC₆H₄PhC(OH)CO₂R', 96.2, 155-6°; 4-MeOC₆H₄PhC(OH)CO₂R'', 63.9, 185-7°; (C₁₁H₇)₂C(OR')CO₂R', 35.6, 160-1° (dihydrochloride). The following salts were prepd.: 1-chlorotropanebenzoic acid, C₁₁H₁₇O₃NCl, m. 141-2°; 1-chlorotropaneantipic acid, m. 167.5-8°, C₁₁H₁₇O₃NCl; 1-chlorotropanediphenylacetic acid, m. 124-5°. Triphenylacetate HCl salt, m. 212-13°, was prepd. by the reaction of Ph₃CHCOCl with tropine in PhMe, followed by treatment of the ester with dry HCl. Treatment of 12.1 g. tropine in (CH₂Cl)₂ at -10° with 14.15 g. SOCl₂ over 5 hrs., followed by refluxing 2.5 hrs. gave 1-chlorotropane HCl salt, m. 234°; 25% NaOH gave the 1-chlorotropane, b. 84-5° (picrate, m. 215-16°). A little tropidine was formed as by-product.
 G. M. Kozlov

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(2)

Inst. Experimental Med, AMS USSR

28-119-5-55/59

AUTHORS: Polezhayev, L. V., Akhabadze, L. V., Zakharova, N. A.,
Mant'yeva, V. L.

TITLE: On the Regeneration of the Myocardium in Mammals (O rege-
neratsii miokarda u mlekopitayushchikh)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5,
pp. 1039 - 1042 (USSR)

ABSTRACT: It is known from experiments with mammals (References 2, 16-18) and pathological-anatomical data on man (References 1,4) that the cardiac muscle does not regenerate after an injury or infarct, but that it forms a scar. Only newborn cats can regenerate myocardium (Reference 11). The authors tried to bring about the regeneration of myocardium in grown mammals. For this purpose they chose the method of the chemical organospecific traumatization. It is based on the influence exerted by own tissue proteins and their decomposition products, further of nucleoproteins upon the injured organ. Previous experiments (References 8,10,12) yielded positive

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results. Experimental-morphological, biochemical, physiological (electrocardiography - ECG) and histological methods were employed in combination. The experiments were performed with 80 old rats. Under an urethane narcosis and artificial respiration the heart was exposed and the tissue on the front wall of the left ventricle not far from the apex of heart was bloodlessly coagulated by means of an electro-diathermic apparatus. A white infarct-like center of injury, 4-5mm in size and deep, formed. The wound of operation was then sewn up in layers. For 14-20 days the animals (except the control animals) received subcutaneous injections of biopreparations: of hydrolysates and extracts from rat hearts. The method of production of these preparations is described. The test animals were killed between the 1-st to 160-th day after the operation, the hearts were fixed with Gelli-liquid and the paraffin sections dyed. Conclusions: 1) The described center of necrosis is resorbed in the course of time and replaced by small centers of non-differentiated muscles which later decompose and dis-

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On the Regeneration of the Myocardium in Mammals

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appear. The muscles of the marginal zone are neither destroyed nor dedifferentiated nor regenerated. No microcells are formed. 2) When the hydrolysate is given the necrotic center is resorbed 2 1/2 times faster. In its place muscles are newly formed which have no connection with the old muscles of the marginal zone. Microcells are formed in a large amount. The extract stimulates the regeneration less than the hydrolysate. 3) After the injury of the heart the ECG passes an acute, a subacute and a scar stage. The hydrolysate shortens the acute stage and brings about an earlier beginning of the scar stage. In 50% of cases the ECG returns to the norm on the 11-th day after the operation which morphologically corresponds to the restoration of the myocardium. There are 3 figures and 19 references, 12 of which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute for Animal Morphology imeni A. N. Severtsov, AS USSR)

Card 3/4

On the Regeneration of the Myocardium in Mammals

28-119-5-55/59

PRESENTED: January 14, 1958, by K. I. Skryabin, Member, Academy of Sciences, USSR

SUBMITTED: January 14, 1958

Card 4/4

POLEZHAYEV, L.V.; AKHABADZE, I.V.; ZAKHAROVA, N.A.; MANT'YEVA, V.L.

Stimulating the regeneration of the mammalian cardiac muscle
[with summary in English]. Izv. AN SSSR Ser.biol. 24 no.1:16-33
Ja-F '59. (MIRA 12:2)

1. Institute of Animal Morphology, Academy of Sciences of the
U.S.S.R., Moscow,
(HEART--MUSCLE) (REGENERATION (BIOLOGY))

ZAKHAROVA, N.A.; KHROMOV-BORISOV, N.V.

Studies in the series of alkylated aromatic amines. Part 2:
Interaction between unsymmetrical ditertiary n-phenylenediamines
and alkyl iodides. Zhur.ob.khim. 30 no.6:1805-1814 Je '60.
(MIRA 13:6)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh
nauk SSSR.
(Phenylenediamine) (Iodide)

KHROMOV-BORISOV, N.V.; ZAKHAROVA, N.A.

Alkylated amines of the aromatic series. Part 4: Role played by the steric factor in quaternization reactions of dimethyl- and diethylaniline. Zhur.ob.khim. 31 no.7:2270-2274 J1 '61.
(MIRA 14:7)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR.

(Aniline)

ZAKHAROVA, N.A.; KHROMOV-BORISOV, N.V.

Alkylated amines of the aromatic series. Part 5: Production
of primary-quaternary derivatives of p-phenylenediamine.
Zhur.ob.khim. 31 no.8:2604-2609 Ag '61. (MIRA 14:8)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh
nauk SSSR.

(Phenylenediamine)

POLEZHAYEV, L.V.; AKHABADZE, L.V.; ZAKHAROVA, N.A.; YAVICH, M.P.

Effect of pyrogenal and myocardial hydrolyzate on the regeneration of the heart muscle. Dokl.AN SSSR 138 no.3:714-717 My '61.

(MIRA 14:5)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR.
Predstavleno akademikom A.N.Bakulevym.

(Heart—Muscle)

(Regeneration (Biology))

(Pharmacology)

(Tissue extracts)

On the
ZAKHAROVA, N. A. Cand Chem. Sci -- (diss) "The Problem of the
Transmission of ~~the Transmission~~ of Electron Effects to the
2-Aryl-Substituted Series of Benzimidazole." Len, 1957. 15
14 pp 20 cm. (Min of Higher Education USSR, Len Order of Labor
Red Banner Technological Inst im Lensovet), 100 copies
(KL, 19-57, 86)